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ABSTRACT

A report is given of initial efforts to develop a competency-based approach for parents in dealing with and instructing their preschool handicapped children. Parents and professionals ranked a set of identified competencies in parent-child interaction. Results showed that child-related affective areas were generally given higher priority and that parents and professionals showed strong overall agreement in competency priorities. Results of this research are presented in tabular form and discussed relative to current parent involvement practice, application in planning parent programs, and implications for further research. (JD)

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Involvement of Parents in the Special Education of Their Young Handicapped Children: Developing a Competency-Based Approach

by

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- ABSTRACT -

Professionals and parents reviewed a set of 230 competencies identified for parents of handicapped children age birth to six years. A final edited set of 69 competencies was then rank ordered by a second sample of 75 professionals and 31 parents. Results showed that child-related affective areas were generally given higher priority and that parents and professionals showed strong overall agreement in competency priorities. Invididual competencies are reported with median rankings assigned by sample groups. Principal component analysis was used to reduce the 69 competencies into 12 areas. Results are discussed relative to current parent involvement practice, application in planning parent programs, and implications for further research.

Recent trends in special education have led to increased parent involvement in appraisal, placement, and programming for special students, and the literature strongly supports the desirability of parent participation (Benson & Ross, 1971; Gordon, 1972; Karnes, Studley, Wright & Hodgins, 1968; Santostefano & Stayton, 1967; Hunt, 1971). In addition to the philosophical commitment to parent involvement, Public Law 94-142 has also given such involvement a legislative mandate (Abeson and Zettel, 1977; Winslow, 1977). However, there have been few reported efforts to develop a foundation for the content or methodology of parent involvement, even though parent involvement has been evident in a variety of delivery systems for the handicapped. The purpose of this paper is to report on initial efforts to develop a competency-based approach to parent involvement, and reported outcomes deal with identification and prioritization of competencies for parents of young handicapped children.

A review of parenting programs shows that involvement activities have included parents as learners or trainees in parenting skills, teachers of their children, and advocates, disseminators, and project evaluators (Knox & McConnell, 1968; O'Connell, 1975; Macy, 1976; Turner & Macy, 1978; Karnes, 1977; Shearer & Shearer, 1972; Boyd, 1979; Levitt & Cohen, 1975).

Reports in the literature about parent programs frequently neglect to give the rationale underlying parent involvement, even though assumptions about the value and desirability are many times implied. From a professional viewpoint, Hunt (1971) outlined four assumptions as a basis for parent and child centers for parents of poverty, and Karnes, Zehrback, & Teska (1972) listed 16 assumptions basic to the success of involvement for families of handicapped children. However, any systematic study of the

assumptions and beliefs of parents is unfortunately generally ignored in the literature. Warfield (1975) reported parent perceptions of importance of parent education content areas, but the study was done post facto, and the data were apparently not available for the initial planning of the program.

It is also commonly believed that all parents are not as competent as they should or could be, and numerous writers have noted the desirability of improved parent competence (O'Connell, 1975; Painter, G., 1971, p. 14; White, B., 1973). Hunt (1971) has aptly distinguished between competence and innate potential in terms of parenting, and one should not infer that some parents lack the innate potential to be competent. Rather the knowledges, skills, and attitudes of all parents can be improved.

It is our contention that the competency-based strategy offers a promising approach to building a solid foundation for parent involvement as well as for improving parent competence. The competency-based approach has received wide application in teacher training in both regular and special education (Dykes, 1975; Dyer, 1974; Edgar & Neel, 1976; Herr, Algozzine, & Heuchert, 1976; Lindsey, 1976), and its application in parent involvement seems reasonable. A review of literature identified, however, very few competency-based programs for parents of either normal or handicapped children. Forrester (1972) reported observing many competencies through home observations of mothers of infants in low income families. Observed behaviors were classified into five competency areas: mother-infant interaction, infant management, recognition and facilitation of development, effective conduct of activities, and selection and development of play materials. O'Dell, Blackwell, Larcen, and Hogan (1977) described a program using competency-

based training modules for parents of children with severe behavior handicaps. The program reportedly provided 90 hours of training in behavior modification and problem solving techniques and required a prescribed skill level mastery prior to advancement to a succeeding module. The approach allowed individualization in that parents could progress through the modules at varying rates.

The review of literature also failed to identify any systematic attempts to investigate the domain of parenting competencies, which would be a logical first step in developing any competency-based approach. The current study was undertaken to investigate competencies needed by parents of young handicapped children. The study sought to identify and prioritize these competencies in order to provide a basis for parent involvement in Project KIDS, an early intervention project for the handicapped in the Dallas Independent School District, Dallas, Texas. Project management wished to provide individualized activities for parents in terms of competencies as defined and prioritized by both parents and professionals.

Method

Subjects and Procedures

Selection of Competencies. An initial comprehensive list of 230 competencies was identified through brainstorming with university consultants, graduate students, and school-based professionals, and a search of the professional literature (Callahan, 1973; Landreth, 1972; Marzollo & Lloyd, 1972; Painter, 1971). This initial list was refined down to a final list of 69 competencies. The refinement process deleted less important competencies and as much redundancy as possible. The list was also considered a more manageable number of competencies in terms of in-depth study and potential programming.

A competency in the final list was defined as a skill or something a parent should be able to do, and competency statements were primarily expressed in terms of observable behavior.

Selection of Subjects. A sample of 31 middle class parents of similarly aged handicapped children and 75 school professionals (28 psychologists, 23 diagnosticians, and 24 home-school coordinators) participated in the ranking of the final list of 69 competencies. Of the parent sample, 23 were involved in Project KIDS, and the remainder were involved in a similar project in a nearby school district. Parents sampled were those who agreed to participate after being asked by project staff, and all but two were female. All sampled professionals were employees of the Dallas school district, but had no direct involvement with Project KIDS. About 65 percent of professionals were female.

Rankings. Directions for competency ranking asked parents and professionals to rank all 69 competencies from most to least important as required for a parent of a handicapped child aged birth to six years. To allow for ease in handling, each competency was typed on a single slip of paper (about 2 x 4 inches) so that each participant received a packet of competencies resembling a small deck of cards.

Instructions noted that there was no correct ranking and that the purpose of the exercise was to obtain the participant's opinion of the appropriate ranking. Each competency statement carried a randomly assigned identification number, and the participant's record sheet provided 69 spaces for these identification numbers to be placed in the desired order. The order of competencies in the packet received by each participant was counter balanced across participants to offset possible bias introduced by any ordering within

packets. Participants were directed to rank competencies by first sorting them into three groups: 1) pretty important, 2) somewhat important, and 3) not so important and then to review and rearrange the sorting to match their overall priorities. This ranking procedure typically required 20 to 30 minutes.

Analysis and Results

Priorities

Since the distributions of ranks assigned competencies typically deviated from the normal distribution, the median, rather than average, was the preferred measure of central tendency. Figure 1 illustrates an example competency-by-person matrix used to organize the data for analysis, and indicates that person one gave competency one a rank of 19, person two gave competency one a rank of 24, and so forth. Table 1 lists all 69 competency statements and the median ranking and standard deviation of rankings given each statement.

[Put Figure 1 about here]

In Table 1 each competency is listed in numerical order as determined by the randomly assigned identification number. For all four sample groups the median rankings ranged from 2.2 to 65.6. Since the competencies were ranked from one to 69 (from most important to least important), the low numbers represent high priority rankings.

[Put Table 1 about here]

For any single competency, sampled participants typically assigned a wide range in ranks. For example, competency 28 (can care for the special physical needs resulting from the handicap) received a median ranking from parents of 35.0 (see Table 1), but one parent ranked this competency most important, a ranking of one, and another parent ranked it least important

a rank of 69. A wide range in rankings was even noted for competency 10 (can understand and accept the child's disability), which was the top ranked competency by the parent group (median = 4.0). Although 50 percent of the parents assigned a high priority rank of 4.0 or under to this competency, some parents gave this competency lower priority, with one parent assigning it a rank of 60.

One issue surrounding the distribution of rankings assigned individual competencies is the extent of consensus regarding the priority reflected in the median ranking. One could easily envision two competencies with comparable or equal median rankings, say 35.0, but with greatly diverse consensus. For example, the distribution of rankings for competency X might be extremely flat and spread out, whereas the distribution for competency Y might be very peaked with little dispersion. Such a condition obviously shows that there is strong group consensus saying that the importance of competency Y is about mid-way between most and least important, but there is little or no consensus about the importance of competency X.

Inspection of the distribution properties for rankings of individual competencies showed that most distributions were flatter than the normal distribution, and as expected, skewness was most evident in those competencies assigned a very high or low priority. The extent of dispersion within ranking distributions generally suggested variable consensus regarding competency priorities as shown in Table 1. In terms of median rankings, sampled groups agreed that competencies number 8, 10, 11, 12, 18, and 51 were most important, and competencies number 5, 14, 15, and 58 were least important (all but competency 15 showed good consensus).

One further consideration about competency priorities deals with the possible influence of the competency identification number on the ranking process. Close inspection of Table 1 reveals that the six most important competencies, as determined by the average median ranking, are numbered 8, 10, 11, 12, 18, and 51. This might suggest that the identification number biased the rankings, but the correlation between identification number and average median ranking was only .08, essentially indicating no relationship.

Agreement

Spearman rho correlation coefficients were computed between median rankings for all combinations of sampled groups, and these are presented in Table 2. All coefficients indicated strong positive agreement among sample groups (ranging from .69 to .86), and there was somewhat stronger observed agreement among professional groups.

[Put Table 2 about here]

While there was strong overall agreement among groups on competency priorities, groups differed substantially on selected competencies in terms of both median ranking and consensus. For example, competency number 22 (can understand and consider own personal needs) showed extreme group disagreement in that parents gave a median ranking of 57.0 and the median ranking of home-school coordinators was 14.5 (see Table 1). Competency number 52 (can help the child only when he needs it) received very low priority from all sample groups except school psychologists.

Comparison across sample groups in terms of ranking consensus showed that groups were nearly equal overall in that the standard deviation in rankings averaged across all 69 competencies was 17.7 for parents, 17.0 for home-

school coordinators, 17.3 for diagnosticians, and 17.1 for psychologists. However, as was the case for median rankings, group consensus varied significantly for selected competencies. For example, the standard deviation of rankings for competency number 11 (can accept the child as a unique and valuable individual) was 9.3 for home-school coordinators and was 18.7 for parents. A simple F-ratio to test equivalence of two variances ($F = 4.04$) showed that this difference was significant at less than the .001 level ($F = 4.04$; $df = 23, 30$). Similarly, home-school coordinators and educational diagnosticians differed significantly ($F = 2.37$) in terms of consensus on competency number 49 (can respect the child's personal needs and desires; $F = 2.37$, $df = 22, 23$).

Components

A principal components analysis and oblique rotation as executed by the SPSS statistical package (Nie, Hull, Jenkins, Streinbrenner, & Brent, 1975, pp. 479ff.) was computed for data from sampled professionals (N=75). The inclusion of parents with professionals in the analysis would have decreased generalizability of results, and the parent sample was too small to warrant a separate component analysis.

Elements within the matrix of correlations among individual competencies ranged from -.48 to .92, but the vast majority of coefficients were within the $\pm$ .30 interval. This condition necessitated the extraction of a rather large number of components in order to account for any appreciable portion of the total variance in the data. Table 3, which presents the percent of variance accounted by selected numbers of principal components, emphasizes the difficulty in attempting to reduce the matrix.

[Put Table 3 about here]

The first 15 principal components were arbitrarily selected for rotation as these accounted for 67 percent of the variance and still provided a manageable number of components for interpretation. An oblique rotation was selected in the absence of any theoretical basis for independence among components, and there was also an intuitive appeal for allowing some association among components. The basic goal was to rotate the components such that certain competencies correlated well with only one component and only minimally or not at all with remaining components.

A successful component rotation allows interpretation of each component in terms of the correlated competencies. Typical reporting procedure calls for tabular presentation of the competency (k=69) by component (p=15) correlation matrix, but this will not be done due to space limitations. Inspection of the matrix, however, revealed that 40 competencies correlated well (i.e., $r \geq .30$) with only one component, 22 correlated well with only two components, and only seven correlated well with three components. The correlations among rotated components were very low, ranging from .15 to -.23.

The component rotation was successful in that only three of the fifteen principal components were uninterpretable, due to an insufficient number of unique competencies correlating well with the given component. The rotation was successful also in that interpretation of the 12 components included 63 of the 69 competencies (91 percent). Only competencies numbered 1, 5, 9, 43, 53, and 68 did not cluster with any interpretable component. Table 7 presents the 12 interpreted components and the correlations between the 63 competencies and components (see Table 1 to reference individual competency statements).

[Put Table 4 about here]

The purpose of the principal components analysis was to reduce the 69 competency statements into meaningful subareas, and inspection of competency statements grouped according to interpreted components (see Table 1 and 4 shows considerable success. As desired, there is a high degree of logical consistency among competencies within each component. In cases where a given competency correlated comparably with two or more components, the process of interpreting components relied heavily on competency content rather than magnitude of the correlations.

In order to investigate the relative importance of the identified competency areas (that is, interpreted components), median rankings were computed for the subset of competencies associated with each competency area. Inspection of Table 5, which lists the results in terms of median ranking averaged across the four sample groups, shows that the two most important areas dealt with interaction with the child and parental acceptance of the childs' handicap. Table 5 also shows that the consensus (in terms of average standard deviation of rankings) varied across competency areas.

[Put Table 5 about here]

The two least important areas reported in Table 5 were family involvement and the mixed area of emotional setting and materials. However, subdivision of this latter component area revealed that the average median ranking for the emotional competencies (k=3) was 23.2, and it was 54.2 for the materials use and development competencies (k=3). One should note that

the emotional competencies received a priority rating comparable to the two most important competency areas, and it may be more sensible to view this component as two separate areas.

Further inspection of Table 5 indicates some content similarity among selected components. For example component areas six, seven, and eight might be grouped into a single instructional competency area. The first four components, along with the three emotional competencies from component eleven, might be thought of as a general affective area in parent-child interaction and development.

Discussion

The study provided preliminary investigation into the domain of parenting competencies, but certainly did not provide the last word. Further research will likely identify other competencies and perhaps investigate the effects, if any, of phrasing and syntax in competency statements.

The 12 areas of competence derived from the component analysis were fairly comprehensive and may prove to be core areas in the domain of parenting competence. The identified areas included all the areas classified by Forrester (1972), and they presumably included many of the skill areas addressed in the competency-based modules described by O'Dell, et al., (1977). However, very few of the competencies in the current study addressed behavior change principles explicity, and they did not reflect a behavior modification perspective, as did the training modules cited above (O'Dell, et al.).

Some may argue that the set of competencies in the current study reflected too much of a pragmatic perspective in order to be truly representa-

tive of any parenting domain. Callahan (1973) discussed good judgment and creative initiative as being characteristic of good parenting. Certainly selected competencies in the study spoke to these qualities, but some may wonder if the "intangibles" of parenting received adequate representation. We believe these intangibles can be represented, but judgements about the worth of this competency set as a valid sample of parent competencies should await further research.

Another question concerns the wisdom of studying competencies of parents of handicapped children apart from those of normal children. The focus of this study was clearly toward the handicapped, but it may be much more profitable to think in terms of a domain of parent competencies regardless of the child's handicap or other personal attributes. Inspection of competencies identified in this study suggests that they are applicable to all parents, but the application may be a matter of degree. Thus, we might expect priorities associated with selected competencies or competency areas to vary as a function of the child having or not having a handicap. Interestingly enough, recent research by Seberger (1978), using the 69 competencies from this study, found no substantial difference in priorities assigned by parents of young normal children and those assigned by parents of young handicapped children.

Another issue surrounding competency-based programming is the possible effect of concomitant variables on the relative importance of identified competencies, and presumably on content of the domain as well. It seems likely that such variables as the child's age, handicap, socio-economic background of the family, or perhaps parent gender would affect competency priorities. Research is needed to investigate the influence of concomitant vari-

ables on competency priorities in order to develop a basis for parent involvement that is general to varying parent populations such as those in suburban or inner city settings or special culture settings such as Native American groups.

Much of the competency-based research in special education teacher training has led to categorical competencies by handicap (Dykes, 1975; Herr, et al., 1976), and the generic training model has not received wide acceptance. However, a generic model is likely to be much more appropriate to parenting than teacher training, and visual inspection of the competencies in Table 1 suggest considerable applicability across handicap categories.

Methodological questions about procedures for ranking competencies are also in need of study. While participants in the current study ranked all 69 competencies from highest to lowest importance, there are numerous alternative sorting and scaling procedures available, and the most efficient means of determining priority of competencies or competency areas is not known. Feedback from participants in the current study did suggest however that an alternative ranking procedure of rating each competency along a Likert-type scale would likely be ineffective, as participants indicated that all competencies were important. Thus, one might expect such a procedure to yield high ratings for all or most competencies.

One common denominator in the content of parent involvement programs to date has been parent counseling. In fact McDowell (1976) noted that parent counseling was regarded as a necessary component in almost every program for handicapped children. Results of the current study strongly supported the importance of parent counseling in that personal interaction with the child

and parental adjustment to the child's handicap were top priority areas. However, parent self-confidence, a central goal of parent counseling, was given extremely low priority. Again emerging research has found improved parent self-confidence to be one positive outcome of parent involvement (Macy Research Associates, 1978, p. 88; Nebgen, 1979), and improved self-confidence should be a goal of parent involvement, even though sampled parents and professionals gave self-confidence type competencies a low relative priority in this study.

Another area for further research and development is the translation of identified competencies into program activities. Turner (1978) described procedures for developing individualized instructional activities based on a subset of competencies selected from those identified in the current study, and field testing of a competency-based parent program is in progress. Materials from this program are also available (Project KIDS, 1979). A key feature of any parent program should be individualization, and the individualization possible in the competency-based program reported by O'Dell, et al. (1977) as well as that reported by Turner (1978) is encouraging.

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Competency	Persons 1	2	3	4	.	.	.	N	Median Ranking
1	19	24	40	31				22	33.0
2	36	45	51						36.8
3	23	17							15.8
.			(rankings)						
.									
.									
69	17	31							32.0

Figure 1. Example Competency-by-Person Matrix Used to Organize Competency Rankings

Table 1

MEDIAN RANKINGS FOR PARENT AND PROFESSIONAL GROUPS

Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Averag
1. Can remain calm and in control in difficult situations.	Median	33.0	34.5	33.0	39.5	35.0
	SD	19.0	18.6	17.4	18.9	16.
2. Can encourage the child to try new experiences.	Median	36.8	32.0	38.0	34.0	35.2
	SD	14.0	14.4	17.0	14.1	15.
3. Can listen to the child.	Median	15.8	21.0	18.3	13.5	17.2
	SD	15.0	14.6	15.7	10.2	13.
4. Can use everyday activities as learning opportunities for the child.	Median	32.8	37.0	40.0	46.8	39.2
	SD	13.0	16.0	14.1	14.8	14.
5. Can handle money and finances in a responsible way.	Median	58.8	65.5	63.0	62.5	62.4
	SD	17.6	14.2	15.1	15.5	15.
6. Can provide learning experiences outside the home- tryside, museums,	Median	52.0	49.5	59.0	48.0	52.1
	SD	13.8	15.9	14.9	18.3	15.
7. Can talk to the child	Median	19.8	22.5	17.3	15.5	18.8
	SD	15.4	16.4	13.7	11.6	14.
8. Can build the child's self-concept.	Median	12.0	10.5	17.0	16.5	14.0
	SD	18.8	16.0	11.4	15.5	15.
9. Can make plans for the future of the child.	Median	53.0	49.5	55.0	50.5	52.0
	SD	19.8	16.7	18.8	19.4	18.
10. Can understand and accept the child's disability.	Median	4.0	9.5	10.8	8.5	8.2
	SD	19.0	13.3	12.4	14.1	14.
11. Can accept the child as a unique and valuable individual.	Median	16.0	2.2	3.0	8.5	7.4
	SD	18.7	9.3	13.1	14.0	13.8
12. Can show affection to the child by touching or physical contact.	Median	13.3	13.8	17.0	10.0	13.5
	SD	14.2	9.9	20.3	16.2	15.2
13. Can recognize when the child is ready to learn a new thing.	Median	42.7	41.5	38.8	41.5	41.1
	SD	14.5	17.5	14.7	14.6	15.3

Table 1 (continued)

Median Rankings for Parent and Professional Groups

Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Average
14. Can provide or make suitable play materials, activities or toys.	Median	45.0	59.2	58.0	59.8	55.5
	SD	14.7	14.0	9.9	14.4	13.2
15. Can read to the child.	Median	46.0	58.5	58.0	55.2	54.4
	SD	20.2	17.8	21.2	19.2	19.6
16. Can allow child to make mistakes.	Median	28.0	20.5	27.0	31.5	26.8
	SD	17.3	11.0	15.8	17.6	15.4
17. Can make a special effort to spend time with the child.	Median	22.0	23.5	23.0	20.8	22.3
	SD	17.7	16.0	17.7	14.2	16.4
Can understand and accept own feelings about the child and the handicap.	Median	10.8	4.5	9.0	9.0	8.3
	SD	18.8	11.4	16.2	16.4	15.7
19. Can get other family members involved in care and education of the child.	Median	47.3	37.5	41.0	37.5	40.8
	SD	18.4	15.1	17.4	18.7	17.4
20. Can see the child's limitations and strengths in day to day living.	Median	32.3	32.8	30.0	29.0	31.0
	SD	19.3	17.9	15.8	15.3	17.1
21. Can learn from experiences and try new things.	Median	39.3	47.0	46.3	43.5	44.0
	SD	17.1	14.8	13.4	19.2	16.1
22. Can understand and consider own personal needs.	Median	57.0	14.5	36.0	20.5	32.0
	SD	19.0	20.8	21.9	21.4	20.8
23. Can recognize and consider special needs of other family members.	Median	53.0	35.5	44.0	39.5	43.0
	SD	18.5	21.2	17.9	19.9	19.4
24. Can provide the proper exercise for the child.	Median	37.3	47.0	44.3	37.5	41.5
	SD	18.8	18.0	16.6	16.1	17.4
25. Can carry out professional directions for the child's care.	Median	40.8	42.5	26.0	33.5	35.7
	SD	19.9	18.8	22.7	18.7	20.0

Table 1 (continued)

Median Rankings for Parent and Professional Groups

Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Averag
26. Can find help or special services for the child's handicap.	Median	17.0	31.5	29.8	31.0	27.3
	SD	18.6	20.8	20.8	20.2	20.
27. Can give the child a chance to interact with other children and adults.	Median	40.0	46.0	45.0	35.0	41.5
	SD	16.5	16.9	15.7	11.3	15.
28. Can care for the special physical needs resulting from the handicap.	Median	35.0	44.0	41.8	38.0	39.7
	SD	22.4	21.1	19.8	19.3	20.6
29. Can teach the child proper toilet training.	Median	44.7	41.0	46.0	59.0	47.7
	SD	18.5	18.5	19.1	21.4	19.4
30. Can teach the child to control his emotions.	Median	43.0	34.5	33.8	46.2	39.4
	SD	17.6	17.4	14.4	15.6	16.2
31. Can face problems and seek solutions.	Median	29.7	37.5	19.0	30.5	29.2
	SD	16.1	19.8	17.1	20.3	18.3
32. Can talk and listen to other family members.	Median	56.0	34.5	43.3	44.5	44.6
	SD	15.9	17.9	16.4	18.6	17.2
33. Can allow child to progress at own pace.	Median	26.0	27.5	24.0	25.8	25.8
	SD	16.1	10.2	15.3	14.8	14.1
34. Can see own personal goodness.	Median	62.0	45.5	42.0	41.5	47.8
	SD	17.1	25.1	24.3	24.0	22.6
35. Can provide the child with a good example for how he should act.	Median	33.0	37.5	48.0	51.5	42.5
	SD	17.9	22.7	15.5	15.7	18.0
36. Can be open to receive guidance from professionals.	Median	30.0	40.5	20.0	28.0	29.6
	SD	18.8	14.8	20.7	17.0	17.8
37. Can set goals for the child which are realistic for the child's abilities.	Median	33.8	23.0	26.3	22.0	26.3
	SD	19.1	15.5	12.5	15.6	15.7

Table 1 (continued)

Median Rankings for Parent and Professional Groups

	Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Average
38.	Can talk about personal feelings to others.	Median	59.8	41.5	49.3	44.0	48.6
		SD	18.6	18.7	22.3	20.5	20.0
39.	Can get the right health care for the child.	Median	23.0	37.5	28.0	30.0	29.6
		SD	18.0	19.8	20.6	20.4	19.7
40.	Can give the child a balanced diet.	Median	34.0	42.0	32.0	38.5	36.6
		SD	21.0	18.4	19.6	20.4	19.8
41.	Can teach the child to feed himself.	Median	37.3	44.5	44.0	54.0	45.0
		SD	18.4	16.5	18.7	19.0	18.2
42.	Can help the child to understand the handicap.	Median	22.0	31.5	30.0	30.0	28.4
		SD	23.0	18.9	22.9	19.9	21.2
43.	Can provide a safe home and plan area.	Median	28.0	31.5	44.0	43.5	36.8
		SD	21.0	20.9	18.7	20.4	20.2
44.	Can identify normal developmental progress.	Median	43.0	43.5	51.8	50.0	47.1
		SD	14.6	21.4	22.3	19.2	19.4
45.	Can use methods to stimulate the child's development.	Median	30.0	44.0	41.0	45.5	40.1
		SD	15.0	18.0	16.6	18.1	16.9
46.	Can cooperate with husband or wife in raising the child.	Median	42.0	24.5	29.0	25.5	30.2
		SD	20.3	16.3	15.0	17.9	17.4
47.	Can keep the child neat and clean.	Median	32.8	50.0	46.0	48.5	44.3
		SD	21.1	23.5	22.5	18.9	21.5
48.	Can create situations in which the child can succeed.	Median	32.3	25.0	25.0	27.0	27.3
		SD	15.0	19.5	14.4	15.8	16.2
49.	Can respect the child's personal needs and desires.	Median	21.8	17.5	25.0	28.5	23.2
		SD	16.1	13.0	20.0	18.5	16.9
50.	Can match learning activities, materials and toys to the child's level of development.	Median	42.8	52.5	57.8	52.5	51.4
		SD	15.5	13.8	11.1	14.7	13.4

Table 1 (continued)

Median Rankings for Parent and Professional Groups

	Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Average
51.	Can give the child a stable home life.	Median	11.3	11.5	19.0	20.5	15.6
		SD	16.1	16.6	18.1	14.2	16.
52.	Can help the child only when he needs it.	Median	48.3	55.5	51.0	25.0	45.0
		SD	19.3	15.6	17.6	17.6	17.
53.	Can give needed encouragement, praise and reward to the child.	Median	14.0	21.5	26.7	20.5	20.7
		SD	13.2	18.0	15.8	15.0	15.
54.	Can show good mental health.	Median	37.0	37.5	29.0	34.5	34.5
		SD	19.9	23.2	19.0	20.8	20.
55.	Can adjust to little or slow progress by the child.	Median	37.0	26.5	21.0	30.5	28.8
		SD	19.4	15.4	15.6	15.0	16.
56.	Can relieve the child's fears.	Median	23.0	26.5	35.0	34.5	29.8
		SD	16.9	20.2	18.2	18.8	18.
57.	Can let the child ask questions.	Median	20.8	34.0	32.8	28.5	29.0
		SD	16.6	18.8	15.5	19.3	17.
58.	Can share ideas and information with other parents.	Median	57.3	53.5	61.0	53.0	56.2
		SD	14.8	14.1	15.4	15.0	14.
59.	Can let the child explore.	Median	31.0	31.5	35.5	32.5	32.6
		SD	17.4	15.1	17.5	16.5	16.
60.	Can recognize different moods and feelings in the child.	Median	32.0	30.5	35.8	31.5	32.4
		SD	18.3	15.5	14.9	13.7	15.
61.	Can help other family members understand what the child can or cannot do.	Median	43.0	33.0	41.5	44.0	40.4
		SD	20.4	19.2	18.8	15.7	18.
62.	Can set rules and limits for the child's behavior and consistently enforce them.	Median	30.0	25.5	24.0	22.5	25.5
		SD	18.5	17.6	17.3	15.7	17.
63.	Can avoid nagging, criticizing, or belittling the child.	Median	24.8	19.5	29.0	17.5	22.7
		SD	17.4	16.0	16.3	12.8	15.
64.	Can discipline the child without unreasonable punishment or anger.	Median	27.3	20.5	30.0	27.5	26.3
		SD	19.5	18.4	17.8	14.0	17.

Table 1 (continued)

Median Rankings for Parent and Professional Groups

Competency	Ranking	Parents (N=31)	Home School Coordinators (N=24)	Diagnosticians N=23)	Psychologists (N=28)	Average
65. Can teach the child to bathe and dress.	Median	42.3	45.0	47.3	55.5	47.5
	SD	16.3	18.4	18.0	18.5	17.1
66. Can provide the child with an orderly daily routine.	Median	44.0	43.5	36.0	50.2	43.4
	SD	19.6	16.5	17.5	17.5	17.8
67. Can set reasonable time limits for the child to reach goals.	Median	47.0	32.5	35.3	35.0	37.4
	SD	16.6	14.9	18.7	16.6	16.7
68. Can use first-aid in times of emergency.	Median	39.0	53.5	52.0	58.5	50.8
	SD	20.0	18.6	20.3	22.3	20.3
69. Can know when the child makes progress.	Median	32.0	36.5	39.3	43.5	37.8
	SD	14.8	15.2	17.0	15.3	15.6

Table 2

CORRELATIONS AMONG SAMPLED GROUPS
IN COMPETENCY PRIORITIES

Sample Group		1	2	3	4
Parents	1	1.00	.77	.72	.69
Diagnosticians	2		1.00	.83	.86
Home-School Coordinators	3			1.00	.82
Psychologists	4				1.00

Table 3

PERCENT OF VARIANCE BY
NUMBER OF PRINCIPAL COMPONENTS

Number of Components	Eigen Value	Cumulative Percent of Variance
1	7.73	11.2
5	3.33	35.6
10	2.14	54.1
15	1.57	67.0
20	1.16	76.4
25	0.88	83.7

Table 4

IDENTIFIED COMPONENTS AND COMPETENCY CORRELATIONS

Component interpretation	Competency ID Number	Correlation with component
(1) Personal interaction with child	3	.71
	7	.71
	17	.62
	62	.49
	63	.44
	12	.42
(2) Parent adjustment to child's handicap	42	-.62
	10	-.52
	55	-.40
	64	-.38
	18	-.20
(3) Individual acceptance of child	11	-.79
	33	-.50
	2	-.47
	16	-.39
(4) Child's social/ self confidence	60	-.84
	56	-.54
	66	.46
	48	-.41
	27	-.39
(5) Parent-professional interaction	25	.72
	26	.71
	36	.68
	39	.50
	28	.47
	31	.26
(6) Child-centered exploratory learning	6	.73
	59	.71
	57	.57
	4	.40
	8	.37
(7) Assessment and goal setting - I	69	-.79
	20	-.68
	67	-.60
	45	-.42
(8) Assessment and goal setting - II	37	.64
	13	-.52
	44	-.48
(9) Family involvement	19	.79
	32	.79
	23	.74
	61	.69
	46	.62
	22	.37
(10) Developing basic self-care	29	-.91
	65	-.87
	41	-.85
	52	.58
	47	-.56
	30	-.41
	40	-.38
	24	-.27
(11) Positive emotional setting/ materials and development	14	.73
	15	.44
	50	.43
	35	-.63
	51	-.46
	49	-.42
(12) Parent self-confidence	38	-.70
	34	-.61
	21	-.49
	54	-.36
	58	-.36

Table 5

MEDIAN RANKINGS OF IDENTIFIED COMPONENT AREAS

Competency Area	Number of Competencies	Parents[a]	Coordinators	Diagnosticians	Psychologists	Average Median Ranking	Average Standard Deviation[b]
(1) Personal interaction with child	6	20.9	20.8	20.7	16.5	19.7	15.4
(2) Parent adjustment to child's handicap	5	22.0	20.5	21.0	27.5	22.8	17.1
(3) Individual acceptance of child	4	27.0	23.8	25.5	29.6	26.5	14.7
(4) Child's social/self-confidence	5	32.0	26.5	35.0	31.5	31.2	16.6
(5) Parent-professional interaction	6	29.8	39.0	27.0	30.8	31.6	19.4
(6) Child-centered exploratory learning	5	31.0	34.0	35.5	32.5	33.3	16.0
(7) Assessment and goal setting - I	4	32.2	32.7	37.3	39.2	35.4	16.6
(8) Assessment and goal setting - II	3	38.2	34.6	37.0	38.2	37.0	16.8
(9) Family involvement	6	50.2	33.8	41.2	38.5	40.9	18.4
(10) Developing basic self-care	8	39.8	44.8	45.1	47.4	44.3	18.5

Table 5 (cont'd.)

MEDIAN RANKINGS OF IDENTIFIED COMPONENT AREAS

Competency Area	Number of Competencies	Parents[a]	Coordinators	Diagnosticians	Psychologists	Average Median Ranking	Average Standard Deviation
(11) Positive emotional setting/ materials use and development	6	37.9	45.0	52.9	52.0	47.0	16.2
(12) Parent self-confidence	5	57.3	45.5	46.3	44.0	48.3	18.8

[a]Note that component analysis included only data from professional groups; it was assumed that similar analysis from a representative parent sample would yield the same competency areas.

[b]This value was computed by taking the average of the standard deviations averaged across sample groups (as reported in Table 1) for the subset of competencies underlying each component.